



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/575,722

06/21/2006

Jean-Michel Santarella

3952-83

1796

23117

7590

08/19/2009

NIXON & VANDERHYE, PC  
901 NORTH GLEBE ROAD, 11TH FLOOR  
ARLINGTON, VA 22203

EXAMINER

REDDY, SATHAVARAM I

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

08/19/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/575,722	<b>Applicant(s)</b> SANTARELLA ET AL.	
	<b>Examiner</b> SATHAVARAM I. REDDY	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 29-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 29-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election without traverse of Group I, claims 1-9 in the reply filed on 5/26/2009 is acknowledged.

2. Claims 10-28 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected products, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 5/26/2009.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**4. Claims 29-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

5. Claims 29-35 recites the limitation "Cold sealable barrier paper". There is insufficient antecedent basis for this limitation in the claims in that it was not mentioned in the independent claim.

Art Unit: 1794

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**7. Claims 1, 29, 30, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCarthy et al (US 4,804,573) in view of Podhajny (US 2003/0091767).**

Regarding claim 1, McCarthy et al (US 4,804,573) discloses a cold sealable flexible packaging paper of a support paper ("sheet material"; col. 1, lines 32-38; col. 2, lines 46-50), a printing which is printed directly on the face side ("sheet material"; col. 1, lines 32-38; col. 2, lines 46-50), a sealable layer on at least a part of the reverse side ("cold seal adhesive"; col. 1, lines 32-43) and a water vapor barrier layer covering the printing consisting of a mixture of acrylic polymers ("overprint varnish"; col. 1, lines 65-68; col. 2, lines 1-23). The overprint varnish of McCarthy et al (US 4,804,573) can be made of the same materials as the cold seal adhesive which is an acrylic resin emulsion. The emulsion contains 0% of wax by weight which is the same as less than 5% of wax by weight. The packaging material is flexible in that it comprises of paper which is a flexible material.

Art Unit: 1794

McCarthy et al (US 4,804,573) does not explicitly disclose the total acid number of the acrylic polymers being between 30 and 65.

However, Podhajny (US 2003/0091767) discloses the total acid number of the acrylic polymers being less than 100 (paragraph [0040]).

Podhajny (US 2003/0091767) and the claims differ in that acid number does not teach the exact same proportions as recited in the instant claims.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by Podhajny (US 2003/0091767) overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, particularly in view of the fact that;

“The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages”, In re Peterson 65 USPQ2d 1379 (CAFC 2003).

Also, In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934 (CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

Art Unit: 1794

Regarding claim 29, McCarthy et al (US 4,804,573) discloses a water vapor barrier layer covering the printing ("overprint varnish"; col. 1, lines 65-68; col. 2, lines 1-23).

McCarthy et al (US 4,804,573) does not appear to explicitly disclose the water vapor barrier layer having a mass between 2 and 10 g/m<sup>2</sup> as humid matter.

However, it would have been obvious to one having ordinary skill in the art at the time of the invention to adjust the coating amount of the water vapor barrier layer to provide a mass of 2 and 10 g/m<sup>2</sup> as humid matter for the intended application in that it is a coating and a coating with a thickness would have a coating weight, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claim 30, McCarthy et al (US 4,804,573) discloses the sealable layer on at least a part of the reverse side ("cold seal adhesive"; col. 1, lines 32-43).

Regarding claim 33, McCarthy et al (US 4,804,573) discloses the acrylic polymers having 10 to 175 parts by weight of resin with 10 to 120 parts by weight of latex (col. 2, lines 19-23).

Art Unit: 1794

In terms of weight percent, the resin would be 7.7% to 94.6% by weight of the resin from dividing the parts by weight of the resin over the total amount of both components as seen below:

A: resin component

B: latex material

$$(A/(A+B))*100 = \%$$

$$(10/(10 + 120))*100 = 7.7\%$$

$$(175/(175 + 10))*100 = 94.6\%$$

McCarthy et al (US 4,804,573) and the claims differ in that the resin by weight does not teach the exact same proportions as recited in the instant claims.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by McCarthy et al (US 4,804,573) overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, particularly in view of the fact that;

“The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of

Art Unit: 1794

percentages”, In re Peterson 65 USPQ2d 1379 (CAFC 2003).

Also, In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934 (CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

Regarding claim 34, McCarthy et al (US 4,804,573) does not explicitly disclose the acrylic polymers being 100% by dry weight of the layer.

However, Podhajny (US 2003/0091767) discloses the acrylic polymers being 100% by dry weight of the layer (paragraph [0040]). The acrylic polymer dispersion of Podhajny (US 2003/0091767) after being applied is dry and the acrylic polymer dispersion does not does not contain any other materials. Therefore, the acrylic polymers are 100% by dry weight of the layer.

McCarthy et al (US 4,804,573) and Podhajny (US 2003/0091767) are analogous art because they are from the same field of packaging materials.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of McCarthy et al (US 4,804,573) and Podhajny (US 2003/0091767) before him or her, to modify the packaging material of McCarthy et al (US 4,804,573) to include the acid number 100% by weight of Podhajny (US 2003/0091767) in that having a layer entirely of acrylic polymers with the required acid

Art Unit: 1794

number provides water resistance in packaging applications (paragraph [0043], lines 1-5).

**8. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCarthy et al (US 4,804,573) and Podhajny (US 2003/0091767) in view of Salste et al (US 2002/0136878).**

McCarthy et al (US 4,804,573) and Podhajny (US 2003/0091767) are relied upon as described above.

Regarding claim 31, McCarthy et al (US 4,804,573) and Podhajny (US 2003/0091767) do not appear to explicitly disclose an oxygen and aroma barrier layer of ethylene vinyl alcohol or polyvinyl alcohol with 3 to 4 g/m<sup>2</sup> of dry matter and positioned between a support paper and a sealable layer.

However, Salste et al (US 2002/0136878) discloses an oxygen and aroma barrier layer of ethylene vinyl alcohol or polyvinyl alcohol with 1 to 8 g/m<sup>2</sup> of dry matter and positioned between a support paper and a sealable layer (paragraphs [0010] and [0017]). The ethyl vinyl alcohol layer (Fig. 1 #5) of Salste et al (US 2002/0136878) is between the support paper (Fig. 1 #3; “cardboard”) and a sealable layer (Fig. 1 #6; “adhesive”).

Salste et al (US 2002/0136878) and the claims differ in that the mass of the oxygen and aroma barrier layer does not teach the exact same proportions as recited in the instant claims.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by Salste et al (US 2002/0136878) overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, particularly in view of the fact that;

“The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages”, In re Peterson 65 USPQ2d 1379 (CAFC 2003).

Also, In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934 (CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

McCarthy et al (US 4,804,573), Podhajny (US 2003/0091767) and Salste et al (US 2002/0136878) are analogous art because they are from the same field of packaging materials.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of McCarthy et al (US 4,804,573), Podhajny (US

Art Unit: 1794

2003/0091767) and Salste et al (US 2002/0136878) before him or her, to modify the packaging material of McCarthy et al (US 4,804,573) and Podhajny (US 2003/0091767) to include the ethyl vinyl alcohol barrier layer of Salste et al (US 2002/0136878) in that having an ethyl vinyl alcohol barrier layer provides excellent adhesion to paper or cardboard (paragraph [0009]).

**9. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCarthy et al (US 4,804,573) and Podhajny (US 2003/0091767) in view of Zhang et al (US 6,713,548).**

McCarthy et al (US 4,804,573) and Podhajny (US 2003/0091767) are relied upon as described above.

Regarding claim 32, McCarthy et al (US 4,804,573) and Podhajny (US 2003/0091767) do not appear to explicitly disclose the mixture of acrylic polymers being a mixture of styrene acrylic polymers.

However, Zhang et al (US 6,713,548) discloses the mixture of acrylic polymers being a mixture of styrene acrylic polymers (col. 5, lines 51-67; col. 6, lines 1-8; col. 6, lines 53-62). Styrene monomers combined together make up styrene polymers.

Art Unit: 1794

McCarthy et al (US 4,804,573), Podhajny (US 2003/0091767) and Zhang et al (US 6,713,548) are analogous art because they are from the same field of packaging materials.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of McCarthy et al (US 4,804,573), Podhajny (US 2003/0091767) and Zhang et al (US 6,713,548) before him or her, to modify the packaging material of McCarthy et al (US 4,804,573) and Podhajny (US 2003/0091767) to include the mixture of styrene acrylic polymers of Zhang et al (US 6,713,548) in that having a mixture of styrene acrylic polymers provides excellent water and grease resistance (col. 5, lines 17-21).

**10. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCarthy et al (US 4,804,573), Podhajny (US 2003/0091767) and Salste et al (US 2002/0136878) in view of Bettel III et al (US 4,977,004).**

McCarthy et al (US 4,804,573), Podhajny (US 2003/0091767) and Salste et al (US 2002/0136878) are relied upon as described above.

McCarthy et al (US 4,804,573), Podhajny (US 2003/0091767) and Salste et al (US 2002/0136878) do not appear to explicitly disclose the EVOH being 100% by weight of the layer.

However, Bettle III et al (US 4,977,004) discloses the EVOH being 100% by weight of the layer (col. 5, line 67-col. 6, line 2).

McCarthy et al (US 4,804,573), Podhajny (US 2003/0091767), Salste et al (US 2002/0136878) and Bettle III et al (US 4,977,004) are analogous art because they are from the same field of packaging materials.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of McCarthy et al (US 4,804,573), Podhajny (US 2003/0091767), Salste et al (US 2002/0136878) and Bettle III et al (US 4,977,004) before him or her, to modify the packaging material of McCarthy et al (US 4,804,573), Podhajny (US 2003/0091767) and Salste et al (US 2002/0136878) to include the 100% by weight of EVOH of Bettle III et al (US 4,977,004) in that having a layer entirely of EVOH provides superior oxygen non-permeability and superior flavor retention (col. 3, lines 48-55).

### ***Response to Arguments***

**11. Applicant's arguments, see page 4, filed 5/26/2009, with respect to the 112<sup>nd</sup> rejections of claim 4 have been fully considered and are persuasive. The 112<sup>nd</sup> rejections of claim 4 has been withdrawn.**

Art Unit: 1794

**12. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.**

***Applicants argue that Gustafson et al (US 6,251,512) has the printing on the water vapor barrier paper, is writable several times, is water-pervious and is not a barrier layer.***

The Examiner notes that the claims were amended for a flexible packaging paper thus changing the scope of the claims and making the arguments in regard to Gustafson et al (US 6,251,512) moot in that Gustafson et al (US 6,251,512) to a packaging paper.

The Examiner notes that McCarthy et al (US 4,804,573) and Podhajny (US 2003/0091767) discloses the invention of claim 1 as stated above.

***Applicants argue that Torigoe et al (US 5,236,767) is inappropriate in that it is a thermal transfer recording film, that the printing is not on the support and that it does not refer to water, barrier, vapor, oxygen, humid or aroma.***

The Examiner notes that the claims were amended for a flexible packaging paper thus changing the scope of the claims and making the arguments in regard to Torigoe et al (US 5,236,767) moot in that Torigoe et al (US 5,236,767) to a packaging paper.

The Examiner notes that McCarthy et al (US 4,804,573) and Podhajny (US 2003/0091767) discloses the invention of claim 1 as stated above.

***Applicants argue that Williams et al (US 2003/0008116) relates to an image transfer material and not packaging.***

The Examiner notes that Williams et al (US 2003/0008116) referred to a barrier layer and also that the claims were amended for a flexible packaging paper thus changing the scope of the claims and making the arguments in regard to Williams et al (US 2003/0008116) moot in that Williams et al (US 2003/0008116) to a packaging paper.

**13. Applicant's arguments filed 5/26/2009 have been fully considered but they are not persuasive.**

***Applicants argue that Salste et al (US 2002/0136878) does not render the present invention obvious in that it teaches the requirement of both EVOH and polyamide layers and an adhesive layer between the heat sealable layer and oxygen barrier.***

Art Unit: 1794

The Examiner disagrees and notes that Salste et al (US 2002/0136878) is being used as a teaching reference to teach an oxygen and aroma barrier layer between a support and sealable layer.

However, note that while Salste et al (US 2002/0136878) does not disclose all the features of the present claimed invention, Salste et al (US 2002/0136878) is used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, namely an oxygen and aroma barrier layer between a support and sealable layer, and in combination with the primary reference, discloses the presently claimed invention.

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Salste et al (US 2002/0136878) was cited in the previous PTO-892. Bekele (US 5,491,009), Penzel et al (US 5,624,748) and Vanderhoff et al (US 6,140,386) are pertinent in that they refer to packaging materials.

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 1794

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SATHAVARAM I. REDDY whose telephone number is (571) 270-7061. The examiner can normally be reached on 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Ruthkosky can be reached on (571) 272-1291. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1794

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Ruthkosky/  
Supervisory Patent Examiner, Art Unit 1795

SATHAVARAM I REDDY  
Examiner  
Art Unit 1794